

AD-A115 646

ARMY RUSSIAN INST APO NEW YORK 09053
SOVIET AIRBORNE ANTI-ARMOR TACTICS IN THE DEFENSE.(U)
JUN 81 R A KUTH
USARI-0001107

F/6 15/7

UNCLASSIFIED

NL

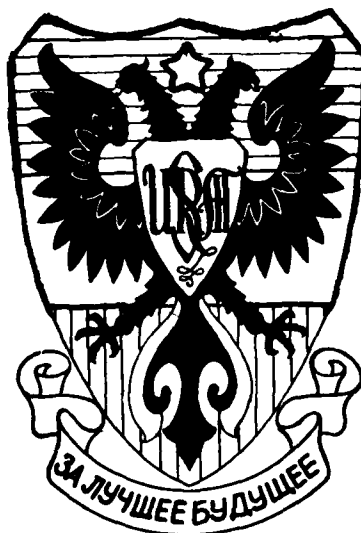
1 36 1
AD-A115 646

| | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

END
DATE
FILMED
7-82
DTIC

AD A115646

U.S. ARMY RUSSIAN INSTITUTE



STUDENT RESEARCH REPORT

SOVIET AIRBORNE ANTI-ARMOR TACTICS
IN THE DEFENSE

CPT. ROBERT A. KUTH

1981

GARMISCH, GERMANY

APO NEW YORK 09063

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

DTIC
ELECTE
JUN 16 1982
H

DTIC FILE COPY

| REPORT DOCUMENTATION PAGE | | READ INSTRUCTIONS BEFORE COMPLETING FORM |
|---|-------------------------------------|--|
| 1. REPORT NUMBER USARI-0001107 | 2. GOVT ACCESSION NO. AD-A275646 | 3. RECIPIENT'S CATALOG NUMBER |
| 4. TITLE (and Subtitle) SOVIET AIRBORNE ANTI-ARMOR TACTICS IN THE DEFENSE | | 5. TYPE OF REPORT & PERIOD COVERED |
| 7. AUTHOR(s) ROBERT A. KUTH | | 6. PERFORMING ORG. REPORT NUMBER |
| 9. PERFORMING ORGANIZATION NAME AND ADDRESS US ARMY RUSSIAN INSTITUTE APO NY 09053 | | 8. CONTRACT OR GRANT NUMBER(s) |
| 11. CONTROLLING OFFICE NAME AND ADDRESS Office of the Director of Instruction US Army Russian Institute | | 10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS |
| 14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) | | 12. REPORT DATE June 1981 |
| | | 13. NUMBER OF PAGES 31 |
| | | 15. SECURITY CLASS. (of this report) UNCLASSIFIED |
| 16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited | | 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE |
| 17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) | | |
| 18. SUPPLEMENTARY NOTES | | |
| 19. KEY WORDS (Continue on reverse side if necessary and identify by block number) | | |
| 20. ABSTRACT (Continue on reverse side if necessary and identify by block number) | | |

2

SOVIET AIRBORNE ANTI-ARMOR TACTICS IN THE DEFENSE

Captain Robert A. Kuth

June 1981

DTIC
SELECTED
JUN 16 1982
S H D

CLEARED
FOR OPEN PUBLICATION

MAR 19 1982 6

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 11-16-82 BY 1043-PA
DEPARTMENT OF DEFENSE

AS INSTRUCTED

US ARMY RUSSIAN INSTITUTE

Garmisch, Germany

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

0001107



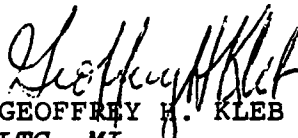
DEPARTMENT OF THE ARMY
U.S. ARMY RUSSIAN INSTITUTE
APO NEW YORK 09053

FOREWORD

This research project represents fulfillment of a student requirement for successful completion of the overseas phase of training of the Department of the Army's Foreign Area Officer Program (Russian).

Only unclassified sources are used in producing the research paper. The opinions, value judgements and conclusions expressed are those of the author and in no way reflect official policy of the United States Government, Department of Defense, Department of the Army, the US Army Intelligence and Security Command, or the Russian Institute. The completed paper is not to be reproduced in whole or in part without permission of the Commander, US Army Russian Institute, APO New York 09053.

This document has been cleared for open publication by the appropriate military service or governmental agency. Interested readers are invited to send their comments to the Commander of the Institute.


GEOFFREY H. KLEE
LTC, MI
Commanding

| | |
|--------------------|--|
| Accession For | |
| NTIS GRA&I | <input checked="checked" type="checkbox"/> |
| DTIC TAB | <input type="checkbox"/> |
| Unannounced | <input type="checkbox"/> |
| Justification | |
| By | |
| Distribution/ | |
| Availability Codes | |
| Avail and/or | |
| Dist | Special |
| A | |

SUMMARY

In this paper the author discusses the organization, equipment, capabilities, and missions of Soviet airborne forces and examines the nature of Soviet airborne tactics in defensive training operations against armor. Particular attention is directed to a survey of selected articles appearing in Soviet military journals, namely, Voenny Vestnik (Military Herald). The author concludes that while the offensive role of Soviet airborne forces is of paramount importance, defensive antiarmor operations and associated problems in forces training and employment remain issues of continued close interest and concern.

TABLE OF CONTENTS

| | |
|---|-----|
| I. Title Page | i |
| II. Summary | ii |
| III. Table of Contents | iii |
| IV. Introduction | 1 |
| A. Historical Development | 1 |
| B. Organization | 1 |
| C. Weapons and Equipment | 2 |
| D. Missions | 4 |
| V. Anti-Armor Defensive Tactics | 5 |
| A. General | 5 |
| B. Battalion Level Operations | 7 |
| C. Company Level Operations | 9 |
| D. Platoon Level Operations | 11 |
| Sketch: Airborne Platoon Defensive Strong Point | 12 |
| E. Training and Performance of the Individual Soldier | 14 |
| F. Specific Aspects of Defensive Training Operations | 17 |
| VI. Conclusions | 18 |
| VII. Footnotes | 22 |
| VIII. Bibliography | 26 |

INTRODUCTION

Historical Development

The development of Soviet airborne forces can be traced to 2 August 1930 when an airborne detachment conducted a parachute combat training assault exercise in the Moscow Military District in order to evaluate the practical use of such forces and individual combat readiness.¹ During the 1930's aircraft and associated equipment and facilities were designed and developed to airlift and drop parachute assault forces for maneuvers on a wider scale. Airborne operations and procedures were formally outlined in instructions and manuals.² By the outbreak of the Great Patriotic War there were six airborne brigades and a gradually-developing airborne corps.³ During the war, major operations were conducted by airborne forces on the Western Front at Yuhnov and Vyazma, during the Dnieper battle on the Voronezh Front, at Minsk, Kiev, Moscow, and Odessa, in the Caucasus and Crimea, and against the Japanese Kwantung Army in August 1945.⁴ Based on their own wartime experience as well as that of the Allies and Nazi Germany, the Soviets have continued to modify and improve airborne forces employment doctrine, and integrate other combat arms into airborne operations.⁵

Organization

Currently there are seven airborne divisions in the Soviet armed forces, which are considered by the Soviets as part of the strategic reserve.⁶ Although Airborne Troops are commonly included as a branch of the Ground Forces, during peacetime, at least, the Minister of Defense and the Chief

of the General Staff retain operational control.⁷ The size of the personnel component of a typical airborne division is 7892 officers and men. The division consists of the following: a headquarters and service element, three airborne regiments (subdivided into three battalions each), an artillery regiment, a reconnaissance company (possibly a battalion); engineer, signal, transport, maintenance, and medical battalions; and a chemical defense company and rigging company. Within the artillery regiment are a howitzer battalion and a multiple rocket launcher battalion. There are also an assault gun battalion and an antiaircraft battalion.

Weapons and Equipment

Divisional artillery fire support assets consist of 18 D30 122-mm howitzers, 18 140-mm multiple rocket launchers, 18 ASU-85 assault guns, 12 85-mm SD44 antitank guns, and 36 ZU-23 twin 23-mm air defense guns. Airborne regimental fire support assets consist of 6 ZU-23s, 6 M-1943 120-mm mortars, 6 SD44 85-mm antitank guns, 72 SPG-9 73-mm recoilless guns, and 21 AT-3/4 antitank guided missiles (ATGM). At regimental level and below are organic SA-7 Grail missiles, man packed AT-3 Sagger missiles, 85-mm RPG-7 antitank gun launchers, and 7.62-mm RPK/PK light machine guns.

The BMD has significantly increased the mobility and firepower of airborne forces. It is airdropable and is armed with a 7.62-mm PKT co-axial machine gun and a Sagger ATGM launch rail mounted atop an auto-loaded, 73-mm, low-pressure, smoothbore gun. The BMD has a crew of three and can carry six passengers. There are 127 BMDs in a division, 107 in the BRD regiment (one per infantry squad).

Overland it can reach, possibly exceed, 40 miles per hour, and six miles per hour in water, and has an estimated cruising range of 250 miles.⁸ The BMD's overpressure air filtration system further enhances the offensive capabilities of airborne forces by providing additional protection in an NBC environment.⁹

There is no known Low-Altitude-Parachute-Extraction-System (LAPES) capability in the Soviet armed forces. Attached artillery, the ASU-85, and, possibly, the ZU-23 must be airlanded; the remaining divisional TOE is airdropable.¹⁰ However, a possible recent development may significantly add to the division's air defense capabilities upon immediate assault of the drop zone. Recent TOEs of Soviet airborne divisions indicate that the SA-9 Gaskin SAM system has replaced the ZU-23 (12 SA-9s in the divisional AA artillery and 12 per each airborne regiment for a total of 48 systems).¹¹ Further, it is likely that the SA-9 is mounted on the BRDM-2, which is airdropable.¹²

Observers estimate that Military Transport Aviation (a branch of Soviet Air Forces) may have the capability to airdrop and airland only one division at a time, and it is questionable whether that capability can be doubled, even using a sizeable share of Aeroflot aircraft.¹³

The magnitude and diversity of weapons and equipment organic to the division indicates the importance attached to and high level of interest in quick and decisive airborne assault operations. It also reflects the capability of Soviet airborne forces to conduct operations in the enemy's rear area for an extended period independent of main/frontal forces.

Missions

Soviet authorities on the roles and missions of airborne forces address their employment primarily in conjunction with nuclear strikes.¹⁴

The role of the airborne troops increased greatly with the appearance of nuclear missile weapons. This is determined first by the fact that they can quickly exploit the results of nuclear strikes by landing in the depth of the enemy dispositions.¹⁵

...There is no doubt that one of the most important missions is to prevent the enemy from restoring his defenses after nuclear strikes and disrupt his measures aimed at eliminating the aftereffects of these strikes...the landing (or drop) of an airborne party must be made as quickly as possible after the nuclear blasts ... 15-25 minutes after delivery ... (This assures) an opportunity to avoid considerable losses during the landing, to capture the designated area before the approach of enemy reserves, and to prevent them from closing the breaches formed as a result of the nuclear strikes...This is one of the main ways to increase rates of advance...of the main grouping...¹⁶

Immediate and subsequent missions of a tactical airborne assault are generally summarized as follows:¹⁷

...(the) capture and holding of areas against which nuclear strikes have been made until the approach of attacking troops ... attacking the enemy from the rear in coordination with troops operating from the front; capture or destruction of enemy nuclear weapons; capture and holding of important objectives and areas in the depth of the enemy's defense; preventing or delaying the approach of his reserves; capture and holding of river crossings; disorganization of the control of troops and interruption of normal operation of rear area agencies; seizure of bases of operation on maritime shores; capture₁₈ of mountain passes, airfields, road junctions, etc.

Airborne assault operations are subdivided into four categories, largely determined by the size of the airborne force, the nature of the objective, and the distance of the objective area from the front.¹⁹

Strategic operations are, as a rule, conducted by a division or corps, against targets of political or strategic importance, well forward of the front lines "at a depth of several hundred kilometers to carry out missions in isolation from the main grouping of the Land Forces over a long time."²⁰ Operational-level airborne operations are those which involve regimental or division size forces under front control and which are assigned missions of seizing key terrain objectives of long range tactical importance (bridgeheads, river crossing sites, airheads) at depths of up to 300 kilometers. Tactical-level airborne operations are generally conducted by battalion size forces, often heliborne. Tactical missions are largely similar to those of the operational-level assault, except smaller in scale and closer to the front. Special Purpose operations are smaller in scale, employing company or lesser sized units, "organized as reconnaissance or raid groups...targeted at either tactical or operational depths."²¹ Missions may also include destruction of enemy nuclear weapons and partisan activities.

ANTI-ARMOR DEFENSIVE TACTICS

General

Although the "immediate" missions of an airborne assault are offensive in nature, airborne forces assume the defense in carrying out "subsequent" missions:²² holding of key strategic targets (beachheads, major port facilities, industrial/logistics complexes, governmental/economic centers) in support of theater operations; defending key terrain (bridgeheads, river crossing sites, airheads, mountain passes, road junctions) vital to ensuing link up operations with advancing main frontal

forces; screening landing zones or the flanks of the main body of an attacking airborne force; blocking force operations to prevent enemy advance, reinforcement, deployment of reserves, or withdrawal from the front; and defending against counterattacking or superior enemy forces.

The overall concept of the defense is based on a series of mutually supporting company and platoon strong points which cover likely avenues of enemy approach.²³ The entire combat formation and/or individual strong points may be echeloned to provide depth, stability, and greater mobility to the defense, or may be positioned in a linear configuration (single echelon) in order to place maximum firepower forward.²⁴ Primary emphasis is placed on a well-organized fire plan (antitank fires, in particular), the use of ambush, the employment of obstacles, optimum use of terrain in preparing defensive positions, and maneuverability to facilitate rapid redeployment of forces to meet developing enemy threats.²⁵ The defensive formation itself can be one of two types -- perimeter or linear -- depending on the nature of the objective, disposition of enemy forces, and avenues of enemy approach into the objective area. In general, the holding of key terrain of operational and tactical importance necessitates the employment of a perimeter defense.²⁶ A linear defense is most often used in blocking force operations.

In discussing airborne forces in the defense, military writers often underscore the temporary and timely nature of such operations and the demand upon the commander for maximum use of available time, together with the need for individual initiative, steadfastness, and psychological hardening.²⁷

What follows is a discussion of Soviet airborne antiarmor defensive tactics at battalion, company, and platoon level. Training and performance

of the individual soldier is addressed, as well as specific aspects of defensive training operations. The articles surveyed have been selected from issues (since 1976) of Voyennyy Vestnik (Military Herald), an official publication of the Soviet Ministry of Defense which is considered to be an informative source on the theory and practice of military operations. The reader's attention is drawn, however, to the element of propaganda in Soviet military writings, and is warned that prior to publication, the Soviets subject each article to careful evaluation and review to insure conformity with official Communist doctrine. With one exception,²⁸ representative articles have been taken from the "Airborne Troops" section within respective issues.

Often the term podrazdeleniye appears in the military literature. It is literally translated "subdivision" and usually refers to ground force units which are subordinate to regiments and independent/separately numbered battalions (infantry/tank battalions, companies, and platoons; regimental artillery battalions and batteries; engineer and signal companies).²⁹

Battalion Level Operations

The battalion occupies a defensive area five kilometers wide and two kilometers in depth, organized into company strong points with intervals of up to one and a half kilometers between adjacent company strong points.³⁰ Battalion attachments may include an assault gun (ASU-85) battery or platoon, a mortar battery, and an engineer platoon. Obstacles are emplaced on the flanks and between company strong points. The battalion commander assigns podrazdeleniye primary and alternate positions, as well as primary and additional sectors of fire, to protect flanks and

rear and to facilitate the shift to a perimeter defense. He develops a staged fire plan and zones of massive fire to engage armored targets along threatened approaches at the maximum effective range of his organic and attached weapons: long range ATGM fire and attached artillery (possibly self-propelled) on "distant approaches"; ATGMs, assault guns, and attached artillery on "medium approaches"; and continuous fire from all weapons to the front of the defense.³¹ He establishes flanking, cross, and close-range fire concentrations ("fire pockets") to the front and in the depth of the defense.³²

Depending on the mission and the disposition of enemy forces, the battalion commander develops and often personally directs a screen for the purpose of rounding out a perimeter defense, covering intervals and exposed flanks, and performing reconnaissance missions. Elements which comprise the screening force may include podrazdeleniye, an ATGM platoon, or in case of a hostile air threat an air defense battery.³³

In support of blocking force operations the battalion commander may organize and employ a covering force with the mission of engaging enemy security elements from positions forward in the defensive area, in order to allow time for fortification of main defensive positions, and cause the enemy to deploy his forces early.³⁴ As mobility and firepower are essential, an assault gun platoon (ASU-85 or ASU-57) is often used in this role. Following engagement and covered by fire from podrazdeleniye, it withdraws on order to prepared firing positions within a company strong point to provide fire support and rear security.

Ambush is key to the battalion commander's organization for defensive combat. Rarely does he assign a force larger than a platoon to carry out this mission, unless the approaching enemy force consists of,

at least, a tank company.³⁵ An ambush position is established along likely routes of enemy movement up to five kilometers forward of the company strong points, ahead of the covering force. An ambush may also be placed in the intervals between company strong points.³⁶ Camouflage, cover, concealment, and the element of surprise both enroute to and during the ambush are of paramount concern to the battalion commander, as well as unobstructed fire and movement of BMDs. Preventing or avoiding decisive engagement, the ambush element breaks contacts and withdraws under covering fire from podrazdeleniye to its prepared position within the main defensive area.

Company Level Operations

The company occupies a defensive area one kilometer in width and depth, organized into platoon strong points with intervals of up to 400 meters between adjacent platoon strong points.³⁷ Company attachments may include an assault gun (ASU-85) platoon, an ATGM platoon, a mortar platoon, and an engineer platoon or squad. Obstacles are emplaced on the flanks and between platoon strong points. The company commander assigns primary and alternate squad positions, primary sectors of fire right and left of reference points, or zero lines of fire by grid azimuth.³⁸ He also designates additional sectors of fire to protect flanks and rear, and to facilitate the shift to a perimeter defense. He can assign (duty) squads a dedicated mission to shift fire on order and engage dismounted infantry, ATGMs, and helicopters.³⁹

Depending on his mission (for example, defensive operations independent of the main assault force), he may perform any one of the following tasks. He can develop his own fire plan with zones of massed fire to

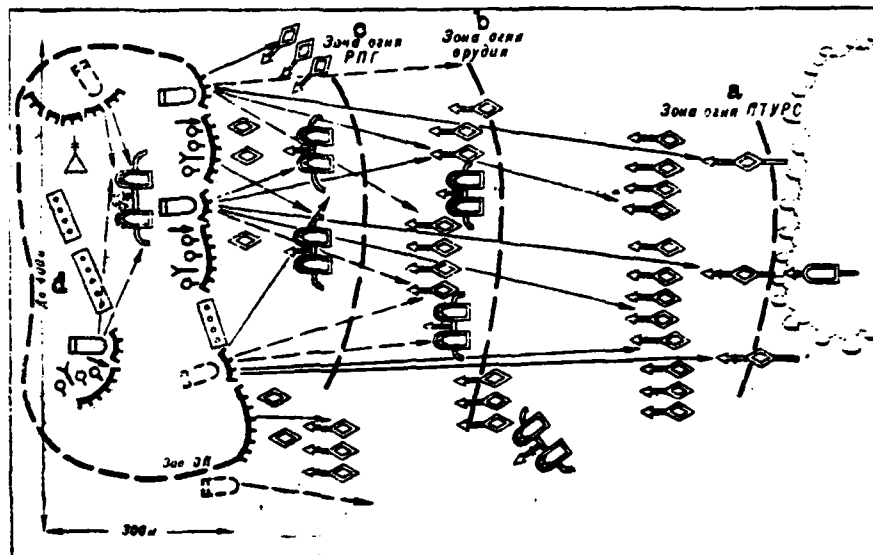
engage at maximum effective range enemy armor along threatened axes. He can personally direct ATGM fire, and by consecutively numbering squads in the company more easily facilitate coordination of and calls for fire.⁴⁰ Tanks have priority of engagement. ATGMs engage tanks at ranges beyond 1200 meters on the company commander's order. BMDs and assault guns engage armored targets at ranges of 600-1200 meters as directed by platoon commanders. The company commander also establishes flanking fire, cross fire, and close-range fire concentrations to the front and in depth of the defense, as well as zones of continuous fire at ranges up to 500 meters.⁴¹ With the attachment of an assault gun platoon he may deploy a covering force to engage targets on approaches to the defense.

When tasked to perform an ambush mission, the company proceeds to the designated ambush site, taking advantage of natural cover and concealment during its movement. Careful map terrain analysis is conducted beforehand to determine the ambush location, and natural and man-made obstacles are integrated into the defensive fire plan to canalize the enemy into the zone of fire. The company ambush is generally oriented on choke points along the route of enemy advance: bridges, road junctions, water crossings, mine barriers, and other points where the enemy's movement is restricted, thereby increasing his vulnerability to hostile fire. Terrain advantageous to the conduct of the ambush consists of two or a series of choke points which extend the length of an enemy column. Under such conditions the leading and closing vehicles encounter mine barriers emplaced by engineer attachments at successive choke points. The company commander assigns sectors of fire to each platoon, BMD, grenade launcher, and machine gun. Especially attentive to camouflage, cover, and concealment, he positions BMDs in order that they may rapidly

break contact, and places grenade launchers between BMDs. He selects as his observation post a vantage point where he can view the entire ambush. As the leading vehicle passes the initial barrier, its explosion signals the company's immediate conduct of fire upon all targets within the column. Enemy crews are engaged with machine guns and automatic weapons fire. As the closing vehicle passes the rearmost mine barrier, it explodes, blocking the column's retreat. Following successful engagement -- or in the event of pursuit by enemy tanks -- the company breaks contact and attempts to rejoin the main assault force.⁴²

Platoon Level Operations

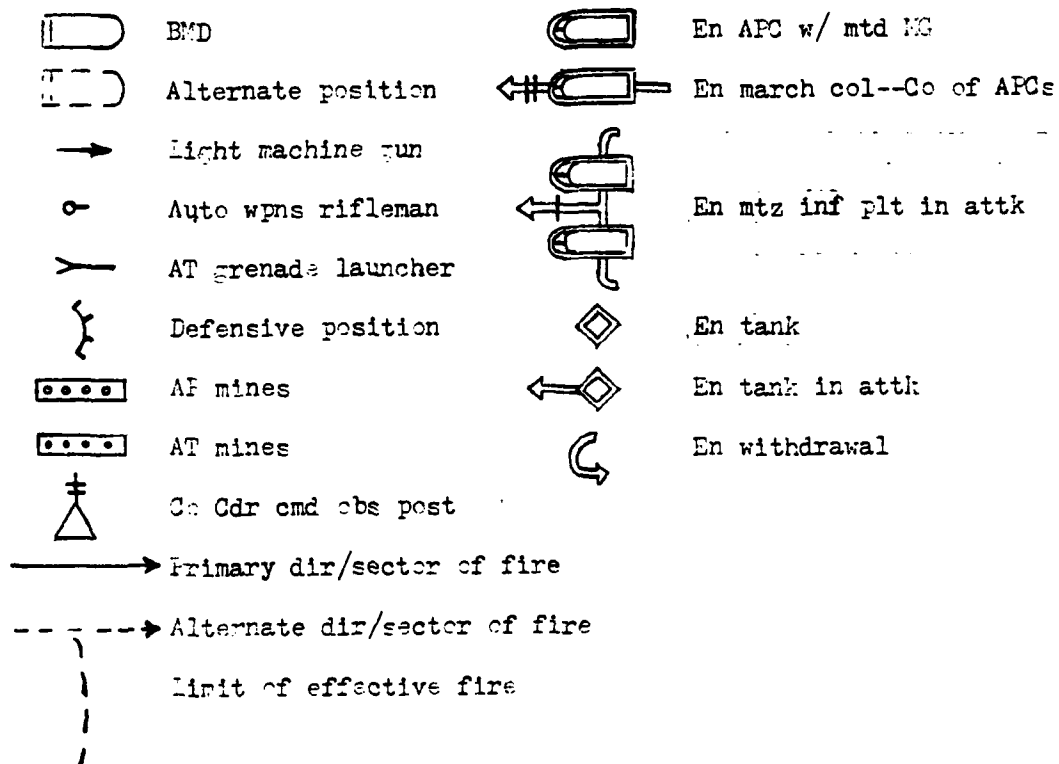
The platoon occupies a defensive area 400 meters in width and 300 meters in depth, organized into individual squad positions (see sketch).⁴³ BMD's are placed 50 to 100 meters to the rear of each squad. Intervals of approximately 200 meters separate BMDs to preclude adjacent ATGM gunners from engaging one another's target.⁴⁶ Obstacles may be emplaced on the platoon flanks, intervals between squads, and in depth. Squads are assigned primary and alternate firing positions for flank and rear protection, as well as primary and alternate sectors of fire. The platoon commander assigns dedicated weapons within each squad (duty weapons) for destroying enemy reconnaissance elements and dismounted infantry with direct and flanking fire. Such weapons may include a BMD, a light machine gun, and automatic weapons.⁴⁷ Rules of engagement stipulate that tanks have priority of fire, that ATGMs on order engage only tanks, and that guns and rocket launchers engage armored targets of opportunity within the range of effective fire. BMDs avoid single combat with tanks. Maximum use is made of camouflage, cover, and concealment in establishing



Airborne Platoon Defensive Strong Point⁴⁴

Legend:⁴⁵

- a. Zone of fire--AT
- b. Zone of fire--weapons
- c. Zone of fire--RPC
- d. Up to 400 meters



individual squad positions. BMDs are positioned on reverse slopes whenever possible, with assigned alternate positions for shifting to perimeter defense. The squad prepares individual prone shelters.

BMD fire is considered basic to the platoon defense. The platoon commander orients the positioning of the BMDs by means of the vehicle's azimuth gyroscope.⁴⁸ In occupying his assigned position the BMD commander orients the axis of the main gun with the long axis of the vehicle, and notes as reference points prominent terrain features within the field of view of the gun sight axis and lateral limits. He then specifies these reference points to RPG and machine gun crews; as well as individual automatic weapons riflemen.

In organizing his plan for defensive combat the platoon commander considers enemy composition and disposition to the front and in his reserve deployment area, the probable time of enemy approach to the defensive area, and the enemy's concept of attack. He also considers the effect of terrain and weather on his conduct of the defense, and the employment of chemical/radiation surveillance in the event of an enemy chemical or nuclear strike. Prior to issuing his order the platoon commander briefs the squads on reference points, the enemy situation, missions of higher, adjacent, and neighboring units, and targets with the platoon's area of operations to be destroyed by fires of the company commander.⁴⁹

The airborne platoon is the basic element for ambush. It occupies a position up to 500 meters in width.⁵⁰ As in the company ambush, the use of camouflage, cover, and concealment is essential. Terrain masking is particularly necessary for MBGs as often there is insufficient time to prepare fortified positions in advance. Upon arriving at the ambush

site the platoon commander specifies squad positions, analyzes the situation and terrain, organizes his fire plan and observation of fires, and issues his order.⁵¹ The primary task for a platoon in ambush is to destroy the leading tank and armored elements of approaching superior enemy forces, using BMD main gun fire against tanks and grenade launcher fire against armored personnel carriers.⁵² Additional tasks may include capture of prisoners, documents, and sample weapons and combat equipment.⁵³ The platoon commander deploys BMDs to insure good observation and fields of fire over the entire ambush area, and he may hold one BMD in a position to provide fire support (with main and machine gun fire). He assigns a precise firing sector for each BMD gunner, grenade launcher, and machine gunner, with accurate ranges determined for each reference point and distinctive terrain feature. The conduct of the ambush is similarly organized on a series of choke points where lead and rear enemy vehicles are destroyed by mines/explosives, and the remaining column is simultaneously engaged by fire. Following completion of specified tasks, the platoon quickly withdraws to rejoin the company.

Training and Performance of the Individual Soldier

Squad level and individual training in defensive antiarmor fighting techniques is generally conducted by a company at a time on a station basis.⁵⁴ A platoon occupies each of three primary training stations/sites. Each major training station consists of two training points. At the first point within training station number one the platoon commander gives instruction on the combat characteristics of "probable" enemy tanks and armored carriers, emphasizing their vulnerable areas as well as strengths.⁵⁵ At the second training point the assistant platoon commander demonstrates

the method of throwing hand antitank grenades from various positions. A tank mockup serves as a target; and the trainees learn how to aim correctly at the mockup's flanking and oblique movement.

At the next training station the soldiers learn from the assistant platoon commander the working principles and design of the hand antitank grenade. At another training point the platoon commander conducts instruction on explosives and detonation equipment. Drawings, sketches, and mockups are used as instructional devices, and hands-on training is the basic instructional method. Both the platoon commander and his assistant are particularly attentive to safety precautions and procedures.

At the third training station the company commander instructs each platoon on close-combat techniques in fighting armor. Here an antitank reaction course/circuit is arranged with a tank, its radio and crew, foxholes, ditches, and buildings. The company commander personally demonstrates the performance tasks in engaging armored targets with hand antitank grenades, antitank mines, grenade launchers, machine guns, and automatic weapons. In the course of instruction he stresses the use of cover for defense against tank fire, and also draws the trainees' attention to the tank's weapons deadspace and how to approach and engage the tank within that area. He particularly adds that the tank is not considered destroyed until its crew is put out of action as well.

The company commander performs the individual tasks in the following sequence. He first occupies a foxhole and from there fires upon the tank's observation devices with an automatic weapon. Once the tank is in range he throws an antitank grenade at the approaching target and drops to the bottom of the foxhole.⁵⁶ He throws a second grenade at the rear of the

passing tank, and as the tank turns in a parallel movement, he exits the foxhole and lies prone in a ditch. Within eight to ten meters of the approaching tank he rolls out of the ditch, throws another grenade from the prone position, and quickly rolls back into the ditch. With the use of a drag line he and the platoon commander place an antitank mine under the tank tracks. The company commander then runs across the tank's approach and occupies a foxhole, and from there engages the tank with a grenade launcher. He then climbs the wall of a destroyed building, jumps on the halted tank, and renders the observation blocks inoperative with blows from an entrenching tool or by covering them with his rain cape.

At this time the company commander stresses the importance of destroying the tank crew. He cautions the trainees against approaching in large numbers an enemy armored vehicle after it had been stopped, as its crew can continue to conduct devastating fire with remaining serviceable weapons. He demonstrates how to approach and destroy the tank by taking advantage of the deadspace of the weapons and vision blocks or by using smoke to conceal his movement. He then points out the need to be prepared to engage the crew with small arms as they emerge from the destroyed vehicle.

The trainees then individually perform the demonstrated tasks in the same sequence. The company commander controls the tank's movement by radio, and with the platoon commander supervises and corrects the individual soldier's performance.

The training at station three concludes with a platoon level performance oriented exercise on the use of obstacles in engaging armored targets. This facilitates the collective demonstration at the unit level of performance tasks learned individually.

Specific Aspects of Defensive Training Operations

Use of map reconnaissance. When discussing airborne operations, Soviet writers make extensive reference to the requirement for commander's map reconnaissance and battle organization prior to or during movement to the objective area. Operating independently in support of missions of tactical and operational importance, airborne forces with little warning must often perform difficult tasks against a superior enemy. As the area to be seized and defended is oftentimes located in the midst of enemy reinforcements or reserves, the shift to the defense usually takes place under enemy pressure in an extremely limited time. Under such conditions there is little, if any opportunity for the commander to conduct a personal ground reconnaissance, as well as execute his troop leading procedures and assume a favorable defensive position.

Orientation of strong points. Almost without fail, the authors orient defensive strong point positions on high ground. As airborne forces generally conduct hasty defense preparations, repeated emphasis is placed on positioning BMDs on reverse slopes in order to take maximum advantage of natural cover and concealment. This is understandable as high ground is considered easily defensible terrain. Moreover, upon seizing key terrain, there is insufficient time for the commander to devise, or even modify his defensive plan. High ground offers easily recognizable terrain features from which the commander can organize a defensive battle plan in advance.

Representation of enemy forces. Whenever the size of enemy forces is established in the conduct of defensive training operations, an approximate three-to-one force ratio in favor of the enemy is usually built into each exercise. The composition of the enemy force in the main defensive area is either tank heavy with attached motorized infantry or motorized infantry with attached tanks. Podrazdeleniye in ambush generally encounter enemy tank elements. It is expected that 11-20 enemy tanks per kilometer of frontage will oppose defending Soviet forces.⁵⁷ Mock-ups and simulated targets are often used to represent enemy armored vehicles.

Reserve. In none of the articles surveyed is there any specific address to the use of a reserve. The writers discuss organizing a defense in such a fashion to easily facilitate the shift to a perimeter defense. Yet, nowhere is there any specific mention of units positioned in depth which may be called upon to move up and reinforce defending units to the front. However, the covering force, upon withdrawal, may occupy a position behind a strong point and support by fire defensive actions to the front, or may shift to alternate positions to cover the rear.

CONCLUSIONS

In assessing Soviet airborne antiarmor tactics in the defense it is necessary not only to stress that the subject remains an issue of continued interest and concern to Soviet writers, but also to point out facts and recurring trends which may adversely affect the conduct and effectiveness of defensive operations. First, Soviet airborne forces rely heavily on mobility and firepower from the very outset of an assault operation. The BMD provides mobility and a significant measure of firepower. In

addition, the possible replacement of ZU-23's with mounted SA-9 Gaskin systems provides an immediate and rather substantial air defense capability for the initial assault element. The literature indicates that in many instances involving company level operations and above the ASU-85 plays an essential role in the Soviet airborne antiarmor defense. In terms of firepower alone, with the exception of the ATGM, it is the basic most centrally used antitank weapon in the division. With respect to mobility and staying power, its capabilities exceed those of any other divisional antitank weapon. However, as the ASU-85 is not airdropable, firepower assets immediately available to the initial airborne assault element are limited. This problem is compounded when there is insufficient space in the enemy rear area to airland the follow-on main airborne assault force, or when existing airfields cannot be captured and defended.⁵⁸

Secondly, Soviet military writers appear readily willing to clearly relate (or, at least, are rather open in doing so) in detail accounts of individual tactical errors and misjudgements spotted and corrected in the course of defensive antitank training. Such deficiencies have included, for example: BMDs in attack formation singly engaging tanks by firing from short halts;⁵⁹ non-adherence to priority of engagement (for example, ASUs initially engaging armored carriers as opposed to tanks⁶⁰); non-adherence to principles of camouflage, cover, and concealment;⁶¹ failing to assign or incorrectly assigning missions (for example, a reluctance to assign screening missions and dispatch combat reconnaissance patrols);⁶² approaching destroyed enemy tanks in large numbers.⁶³ The authors may allude to training related problems. For example, extensive reference to the use of natural cover, and the emphasis placed on a 200-meter

interval between BMDs may infer adverse training performance patterns: in the former case, troops conducting defensive operations in the open, and in the latter, adjacent BMD ATGM gunners confusing one another's missile and target, and thereby losing both missiles.⁶⁴ One can assume that such candid treatment may reflect a widespread and recurring training deficiency.

Third, with respect to the conduct of individual level training, there appears to be a lack of adequate time for planning and preparation. The author states that the company commander begins his preparation two to three days prior to the conduct of the training itself.⁶⁵ Those prior administrative and logistics actions which he must take require some degree of coordination. Unless there already exists an established, well-coordinated training plan already at the company level or issued by higher headquarters, it is difficult to imagine how the training preparation sequence can be smoothed out in a timely fashion. A problem relating to training resource availability may be especially acute when one considers that other companies within the regiment (or division) undergo the same training. Another problem concerns the platoon and squad commanders, those with whom the company commander coordinates on the day before the actual training.⁶⁶ Excluding the possibility of extensive and detailed standardization of training or the commander's proven confidence in his subordinate commanders, it appears that he does not allocate sufficient time to review, evaluate, and correct each platoon's training outline/lesson plan.

Finally, the principle of command and control which appears to apply in the defense is based on a commander's span of control two echelons below, whenever podrazdeleniye operate as part of the main

assault force. In several instances the battalion commander assigned and whenever possible personally verified platoon strong point positions. In the case of the company commander, not only does he oftentimes assign and verify squad positions individually, but may even emplace BMDs and individual squad weapons. The issue takes on added significance in terms of fire control. In many cases the company commander acts as the sole target acquisition and fire control element within the company. ATGMs, sometimes consecutively numbered, fire on his command only, as opposed to firing upon individual acquisition once the tank is within effective range in an assigned sector or zone of fire. This could present a rather critical problem regarding battlefield coordination, as it would appear extremely difficult for the company commander to acquire tank targets and in a timely fashion order and effectively direct fire for the entire company when his platoons and squads are well dispersed.

Such an extreme degree of supervision and control appears to conflict with repeated demands for commander and individual soldier initiative at each level. More significant, the seemingly overcommitted role of the company commander may well reflect a lack of sufficient time for coordination, a lack of confidence in subordinates, subordinate commanders' inexperience/ineptness, the company commander's own reluctance or inability to develop and organize an even more refined defensive battle plan, or all of the above.

FOOTNOTES

¹"Soviet Paratroopers," (Interview with Colonel-General D. S. Sukhorukov, Commander-in-Chief of the Airborne Troops), Soviet Military Review, No. 8 (1980), p. 28.

²A. Panov, "Stages of the Battle Road," Soviet Military Review, No. 5 (1973), p. 6.

³Graham H. Turbiville, "Soviet Airborne Troops," Military Review, April 1973, p. 61; Panov, p. 6.

⁴A. Vasilevsky, "Rout of the Kwantung Army," Supplement to Soviet Military Review, No. 8 (1980), p. 11; "Soviet Paratroopers," p. 30.

⁵See Ivan I. Lisov, Desantniki (Moskva: Voenizdat, 1968), passim; Turbiville, p. 61.

⁶"The Military Balance 1980/1981," Air Force Magazine, December 1980, pp. 68-69; US Department of the Army, Soviet Army Operations (Arlington, Virginia: US Army Intelligence and Security Command, 1978), p. 7-3.

⁷US Department of Defense, Handbook on the Soviet Armed Forces (Washington, D.C.: Defense Intelligence Agency, 1978), p. 8-4.

⁸Bill Gunston, "Army Weapons," The Soviet War Machine, ed. Ray Bonds (New York: Chartwell Books Inc., 1977), p. 183.

⁹Christopher Donnelly, "The Soviet Ground Forces," in Bonds, p. 160; Jane's Armour and Artillery 1979-1980 (New York: Franklin Watts, Inc., 1979), p. 59.

¹⁰In the role of a forward detachment an airborne battalion may be reinforced by a gun battery from regimental or divisional artillery, or a battery of self-propelled artillery, a non-divisional attachment which is not airdropable. A. Bykov, "Parashyutno-Desantnyy Batal'on V Peredovom Otryade," Voyennyy Vestnik, No. 9 (1978), pp. 64, 65. V. Margelov, "Vozdushno-Desantnyye," Voyennyye Znaniye, No. 12 (1978), p. 14, cited in Major Lowry A. West, Soviet Airborne Operations, Thesis (Garmisch: US Army Russian Institute, 14 January 1980), pp. 5, 20 cf; US Department of the Army, Field Manual 30-102, Opposing Forces Europe (Washington, D.C.: Department of the Army, 1977), p. 16-3.

¹¹Jane's, p. 493.

¹²Ibid., p. 397, 139.

- ¹³C. L. Donnelly, "The Soviet Desant Concept," International Defense Review, No. 6 (December 1971), p. 545; West, pp. 4-5, 20 cf.
- ¹⁴Lisov, p. 256.
- ¹⁵A. A. Siderenko, The Offensive (A Soviet View) (Washington, D.C.: US Air Force, 1974), p. 50.
- ¹⁶V. Ye. Savkin, The Basic Principles of Operational Art and Tactics (A Soviet View) (Washington, D.C.: US Air Force, 1972), p. 193-194.
- ¹⁷"[Immediate missions] consists in destroying the enemy, capturing and destroying specified installations and [subsequent missions] in holding the captured objective until the arrival of the forces advancing from the front or delivering a blow in the direction of their advance and sometimes capturing a new objective (line)." Yu. Chernyshov, "A Tactical Airborne Landing," Soviet Military Review, No. 5 (1980), p. 27.
- ¹⁸Savkin, p. 193. See also Siderenko, p. 50, Chernyshov, p. 27, and I. Zuyev, "Manevr Obespechivayet BMD," Voyennyy Vestnik, No. 2 (1976), p. 87.
- ¹⁹Donnelly, "The Soviet Desant Concept," pp. 544-545; Turbiville, pp. 64-65; Soviet Army Operations, p. 7-1.
- ²⁰M. Belov, "Air Landing Forces," Soviet Military Review, No. 1 (1979), p. 22; Soviet Army Operations, p. 7-1.
- ²¹"Soviet Army Operations," p. 7-3.
- ²²Chernyshov, p. 27.
- ²³I. Zuyev, p. 87; Belov, p. 23.
- ²⁴I. Kononov, "Kogda Desant Atakuyut Tanki," Voyennyy Vestnik, No. 3 (1977), p. 58; Kononov, "V Oborone S Boyevoy Strel'boy," Voyennyy Vestnik, No. 6 (1978), pp. 41, 42; V. Zaytsev, and A. Naumov, "Batareya PTURS V Takticheskoy Vozdushnoy Desante," Voyennyy Vestnik, No. 2 (1977), p. 78; Zuyev, p. 88.
- ²⁵Zuyev, p. 87-88.
- ²⁶V. Grechnev, "Sovershenstvuya Takticheskuyu Vyuchku," Voyennyy Vestnik, No. 12 (1977), pp. 75, 77; Zaytsev, p. 79.
- ²⁷Kononov, "V Oborone S Boyevoy Strel'boy," p. 40; Zuyev, p. 87.
- ²⁸Zaytsev, "Batareya PTURS V Takticheskoy Vozdushnoy Desante."
- ²⁹Savkin (American ed. comment), p. viii.
- ³⁰Zuyev, p. 88.

- ³¹Kononov, "Kogda Desant Atakuyut Tanki," p. 59; Zuyev, pp. 87-88; Kononov, "V Oborone S Boyevoy Strel'boy," p. 42; Bykov, p. 64.
- ³²Kononov, "Kogda Desant Atakuyut Tanki," p. 59; Zuyev, p. 88.
- ³³Grechnev, p. 75; Kononov, "Kogda Desant Atakuyut Tanki," p. 58.
- ³⁴Kononov, "V Oborone S Boyevoy Strel'boy," pp. 41, 42.
- ³⁵G. Kuvitanov and V. Dedyukhin, "Rota V Zasade," Voyennyy Vestnik, No. 1 (1976), p. 46; Zuyev, p. 88.
- ³⁶Zuyev, p. 88.
- ³⁷Ibid., pp. 87-88.
- ³⁸Kononov, "V Oborone S Boyevoy Strel'boy," p. 42; Kononov, "Kogda Desant Atakuyut Tanki," p. 59.
- ³⁹Kononov, "V Oborone S Boyevoy Strel'boy," p. 43.
- ⁴⁰Kononov, "Kogda Desant Atakuyut Tanki," pp. 59-60.
- ⁴¹Kononov, "V Oborone S Boyevoy Strel'boy," p. 42.
- ⁴²Kuvitanov, pp. 46-48.
- ⁴³Zuyev, pp. 87-88.
- ⁴⁴Ibid., p. 88.
- ⁴⁵Symbols extracted from US Department of Defense, Handbook of Soviet Armed Forces Military Symbols (Washington, D.C.: Defense Intelligence Agency, 1978), passim.
- ⁴⁶Kononov, "Kogda Desant Atakuyut Tanki," p. 59.
- ⁴⁷O. Babich, "Vzvod V Oborone," Voyennyy Vestnik, No. 6 (1979), p. 29.
- ⁴⁸Kononov, "Kogda Desant Atakuyut Tanki," p. 59.
- ⁴⁹Babich, pp. 28, 29.
- ⁵⁰Zuyev, p. 88.
- ⁵¹G. Shevchuk, "Zasada V Tylu Protivnika," Voyennyy Vestnik, No. 1 (1979), pp. 29, 30.
- ⁵²Kononov, "V Oborone S Boyevoy Strel'boy," pp. 42-43.
- ⁵³Shevchuk, p. 29.

⁵⁴C. Shevchuk, "Chtoby Uspeshno Borot'sya S Tankami," Voyennyy Vestnik, No. 7 (1978), pp. 45-46. See also A. Mineyev, "Fighting Tanks," Soviet Military Review, No. 12 (1980), pp. 18-19.

⁵⁵Shevchuk, "Chtoby Uspeshno Borot'sya S Tankami," p. 45.

⁵⁶Motorized infantry are trained to move to the right or left after throwing the grenade, as the tank's crew will attempt to drive over the foxhole. Mineyev, p. 19.

⁵⁷Kononov, "Kogda Desant Atakuyut Tanki," p. 57; Mineyev, p. 18.

⁵⁸West, p. 14.

⁵⁹Kononov, "Kogda Desant Atakuyut Tanki," p. 58.

⁶⁰Kononov, "V Oborone S Boyevoy Strel'boy," p. 43.

⁶¹Kuvitanov, p. 47; Zaytsev, p. 79.

⁶²Grechnev, pp. 75-76; Babich, p. 29.

⁶³Shevchuk, "Chtoby Uspeshno Borot'sya S Tankami," p. 46.

⁶⁴Kononov, "Kogda Desant Atakuyut Tanki," p. 59.

⁶⁵Shevchuk, "Chtoby Uspeshno Borot'sya S Tankami," p. 45.

⁶⁶Ibid.

BIBLIOGRAPHY

- Babich, O. "Vzvod V Oborone" (The Platoon in the Defense), Voyennyy Vestnik, No. 6 (1979), pp. 27-29.
- Belov, M. "Air Landing Forces," Soviet Military Review, No. 1 (January 1979), pp. 22-23.
- Bonds, Ray (ed.). The Soviet War Machine. New York: Chartwell Books Inc., 1977.
- Bykov, A. "Parashyutno-Desantnyy Batal'on V Peredovom Otryade" (The Airborne Battalion in the Advance Detachment), Voyennyy Vestnik, No. 9 (1978), pp. 64-67.
- Chernyshov, Yu. "A Tactical Airborne Landing," Soviet Military Review, No. 5 (May 1980), pp. 27-29.
- Donnelly, C. L. "The Soviet Desant Concept," International Defense Review, No. 6 (December 1971), pp. 544-546.
- Grechnev, V. "Sovershenstvuya Takticheskuyu Vyuchku" (Improving Tactical Training), Voyennyy Vestnik, No. 12 (1977), pp. 74-77.
- Jane's Armour and Artillery 1979-1980. New York: Franklin Watts, Inc., 1979.
- Kononov, I. "V Oborone S Boyevoy Strel'boy" (In the Defense With Combat Firint), Voyennyy Vestnik, No. 6 (1978), pp. 40-43.
- _____, "Kogda Desant Atakuyut Tanki" (When Tanks Attack An Assault Force), Voyennyy Vestnik, No. 3 (1977), pp. 57-60.
- Kuvitanov, G. and Dedyukhin, V. "Rota V Zasade" (The Company in the Ambush), Voyennyy Vestnik, No. 1 (1976), pp. 46-49.
- Lisov, I. Desantniki (Airborne Soldiers). Moskva: Voenizdat, 1968.
- Margelov, V. "Soviet Airborne Troops," Soviet Military Review, No. 5 (May 1973), pp. 2-5.
- _____, "Vozdushno-Desantnyye" (Airborne Forces), Voyennyye Znaniya, No. 12 (1978), pp. 14-15.
- Mineyev, A. "Fighting Tanks," Soviet Military Review, No. 12 (1980), pp. 18-19.
- Panov, A. "Stages of the Battle Road," Soviet Military Review, No. 5 (1973), pp. 6-7.

- Savkin, V. Ye. The Basic Principles of Operational Art and Tactics (A Soviet View). Washington, D.C.: US Air Force, 1974.
- Shevchuk, G. "Chitoby Uspeshno Borot'sya S Tankami" (In Order to Successfully Fight Tanks), Voyennyy Vestnik, No. 7 (1978), pp. 45-46.
- _____, "Zasade V Tylu Protivnika" (Ambush in the Enemy's Rear), Voyennyy Vestnik, No. 1 (1979), pp. 29-31.
- Siderenko, A. A. The Offensive (A Soviet View). Washington, D.C.: US Air Force, 1974.
- "Soviet Paratroopers" (Interview with Colonel-General D. S. Sukhorukov, Commander-in-Chief of the Airborne Troops), Soviet Military Review, No. 8 (1980), pp. 28-33.
- "The Military Balance 1980/1981," Air Force Magazine, December 1980, pp. 62-131.
- Turbiville, Graham H. "Soviet Airborne Troops," Military Review, April 1973, pp. 60-70.
- US Department of the Army. Field Manual 30-102, Opposing Forces Europe. Washington, D.C.: Department of the Army, 1977.
- US Department of the Army. Soviet Army Operations. Arlington, Virginia: US Army Intelligence and Security Command, 1978.
- US Department of Defense. Handbook of Soviet Armed Forces Military Symbols. Washington, D.C.: Defense Intelligence Agency, 1978.
- US Department of Defense. Handbook on the Soviet Armed Forces. Washington, D.C.: Defense Intelligence Agency, 1978.
- Vasilevsky, A. "Rout of the Kwantung Army," Supplement to Soviet Military Review, No. 8 (1980).
- West, Major Lowry A. Soviet Airborne Operations. Thesis. Garmisch: US Army Russian Institute, 14 January 1980.
- Zaytsev, V. and Naumov, A. "Batareya PTURS V Takticheskoy Vozdushnoy Desante" (The Antitank Guided Missile Battery in an Airborne Assault), Voyennyy Vestnik, No. 2 (1977), pp. 76-79.
- Zuyev, I. "Manevr Obespechivayet BMD" (The BMD Ensures Maneuver), Voyennyy Vestnik, No. 2 (1976), pp. 85-89.